HIGHER GRAPHIC COMMUNICATION

DTP COMMERCIAL PRINTING

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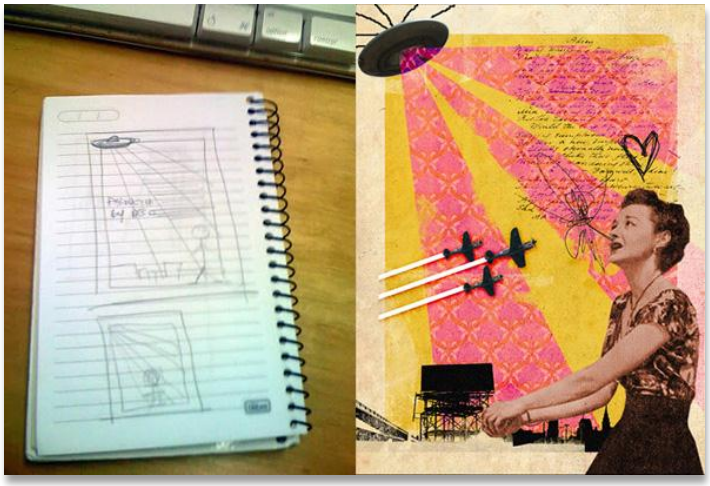
THUMBNAILS

Thumbnail sketches are rough drawings, sometimes only comprehensible to the designer. These quick pen or pencil sketches allow the designer to try out several ideas and zero in on the most likely layouts before beginning a project.

Creating thumbnail sketches is a crucial part of the brainstorming aspect of your graphic design work.



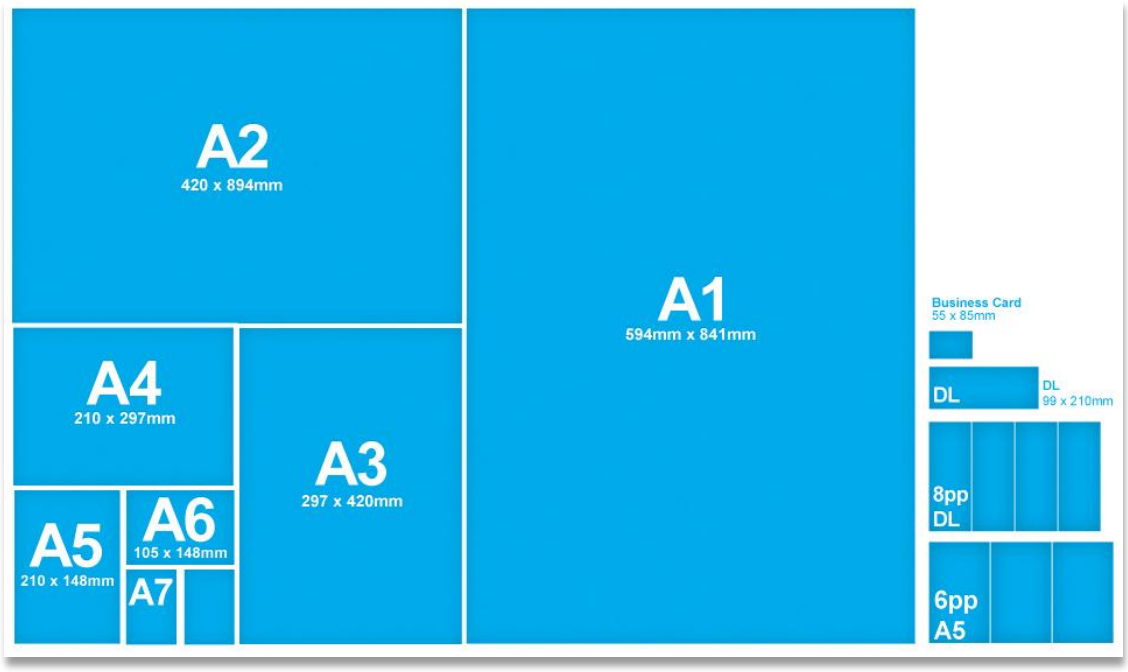
VISUALS & ANNOTATION

Visuals of graphic design publications are presentation visuals which are manually or electronically produced mock-ups of the final layout of the publication. This gives the designer a chance to show the client an overall look and feel for the intended publication.

The designer can then have a discussion with client and annotate changes or thoughts with possible structure changes or colour choices etc…this driving the publication to a final pre-press copy.

PAPER SIZING

Paper is available in sizes from **A0** (biggest) to **A6** (smallest). The most common size is A4. Each size is half the one before, eg A4 is half the size of A3.



Paper thickness is measured in grams per square metre (gsm). This is the weight of one square metre of the paper.

Most paper is manufactured from recycled boards and paper. Virgin paper is made from 100% wood pulp and contains no recycled material.

Different types of paper and board have different uses, as shown in the table below:

Types of paper and their uses

Type	Description and uses
Layout paper	- lightweight, thin white paper - used for initial ideas - takes colour media well - low cost
Tracing paper	- thin, translucent paper - making copies of drawings - high cost
Cartridge paper	- good quality white paper - available in different weights - general purpose work - can be used to make simple models

Type	Description and uses
	- medium cost
Bleedproof paper	- smooth, hard paper - used with water-based and spirit-based felt-tip pens - medium cost
Coloured paper	- many different types - available in different thicknesses - used for mounting finished work - used to apply coloured surfaces to models - low to medium cost
Grid paper	- printed square and isometric grids in different sizes - a guide for quick sketches and model-making - low cost

STOCK PHOTOGRAPHS

Stock photographs are one of the most basic components of marketing and advertising and is completely common to the modern world. Businesses of all shapes and sizes license stock photos for specific uses that have been previously created to illustrate concepts, services, situations, etc.

Every time you read a magazine or whenever you look at newspapers, billboards, textbooks, book covers, blogs, brochures, direct mail, or corporate literature of any type – and even when you watch TV and see stills incorporated into the programming – you are probably looking at stock photography.

The images that companies use in their media (whether it's for marketing, creative or educational purposes) come from basically two sources:

1. Hired a photographer to shoot it; or
2. Purchase a pre-existing image. When someone purchases a pre-existing image, they are purchasing STOCK PHOTOGRAPHS.

Advantages of using Stock Photos:-

- access to high quality images
- an extensive range of images
- broad range of subjects/topics
- constantly refreshing the stock/content
- image size can be selected

Disadvantages of using Stock Photos:-

- financial/monetary/cost implications
- image may not be exactly what is needed/preferred/desired
- potentially large file sizes

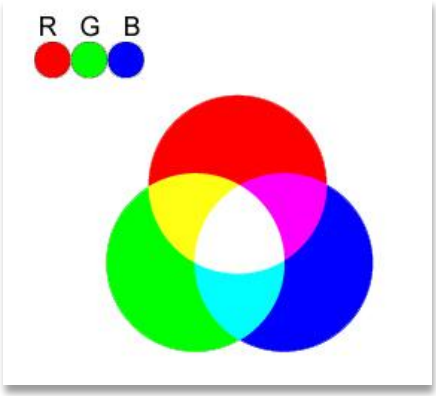
COLOUR PROFILES (CMYK, CMYK & Spot Colours)

You may have heard the terms ***RGB***, ***CMYK*** and/or ***Spot*** in relation to colour, but you may not know what each acronym stands for or why they matter.

If you want your artwork to look the way it was intended to, it is imperative that you understand each of these colour profiles, the difference between them and when to use them.

RGB — Red, Green, Blue.

RGB colour mode is used exclusively in digital design. RGB is associated with screens, such as monitors, televisions, digital cameras and mobile devices. All of these screens produce images by using different colour combinations of red, green and blue. Rather than ink, colours in the RGB colour wheel are created by blending light itself.



CMYK — Cyan, Magenta, Yellow, Key (Black).

CMYK is sometimes referred to as four-color process printing because it utilizes four colours and mixes them. For instance, if you mix yellow and blue, it makes green. CMYK colour mode is used on most printed materials like magazines, posters and brochures. CMYK is what a majority of home printers and commercial printers use.

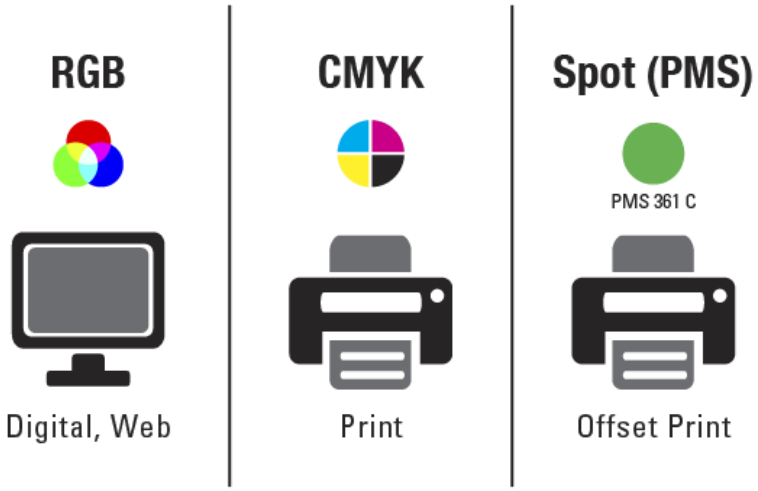
CMYK colours are mixed during the printing process itself. Layers of CMYK ink are laid in varying densities to create tonal differences. CMYK can create a wide range of colours, so it is primarily used for full colour printing.

Spot Colours (PMS) — Pantone Matching System.

PMS is a universal colour matching system used primarily in printing. Pantone colours, also known as spot colours, are used by professional print shops around the world; this is because Pantone colours are extremely precise so you know exactly what colour you are going to get. They eliminate complications and miscommunications when a piece is printed.

Unlike RGB and CMYK, PMS colours are created with pre-mixed ink long before the image is actually produced, resulting in the most consistent colour possible. Every Pantone colour can be found in a Pantone swatch book, and each colour has a corresponding number to it (i.e., PMS 361).

Branding requires consistency and is one of the key reasons to use the Pantone colour.



PRE-PRESS COPY

Pre-press is a printing industry term for the activities that occur *after* a commercial printer receives an order and a corresponding graphics file from a client or graphic designer, but *before* any actual printing takes place.

For a graphic designer it is the process of creating a high quality, final draft print file ready for professional/industry printing.

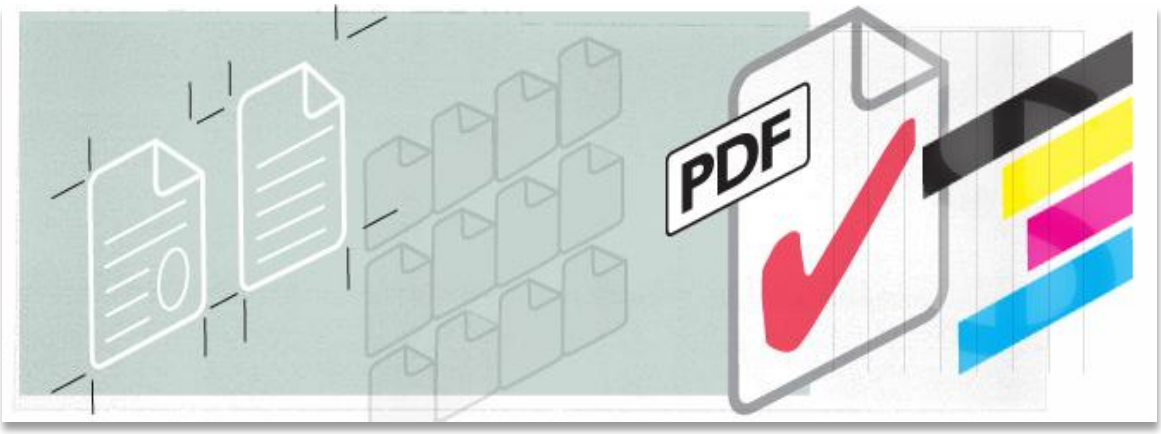
The First Stage: Pre-Flight

Once the graphics file has been created by the designer, it undergoes the first pre-press stage – the **pre-flight**. During the pre-flight, the file is checked to make sure it contains all the elements necessary for a successful print run.

For example, the file is checked to make sure the images have the proper format and resolution, the fonts are all included, the PMS/CMYK colours are set up appropriately, all layout elements such as margins, crop marks and bleeds are set up correctly, etc.

Also, depending on the software used to create the original graphics file, sometimes the entire file needs to be converted to a format better suited for commercial printing, like an Adobe PDF (Portable Document Format).

Basically, the pre-flight stage is performed first to catch any issues with the file set-up that might prevent it from being print ready. Bear in mind that pre-flighting is not really intended to find and correct mistakes in grammar or spelling, so it is recommended that all general editing and proofreading be performed by the client and/or designer prior to the pre-flight stage.



The Second Stage: Creating a Proof

Once the graphics file passes the pre-flight stage, it moves on to the second pre-press stage – creating a **proof**. A proof is a close representation of how the finished piece will appear when it is printed.

On many projects, such as business cards or postcards, a proof is often created as a PDF. Since a PDF is an electronic file, it can be emailed to the client for approval, which greatly speeds up the proofing process.

Also, if a print project involves finishing operations such as binding or folding – like that of a book or brochure – it is recommended that a physical proof be created. A physical proof will demonstrate how the piece will be constructed, where it will be folded, the order of the pages, etc.

In addition to avoiding any unforeseen errors, the purpose of the proof stage is to ensure that the client and printer are in complete agreement on the desired outcome.

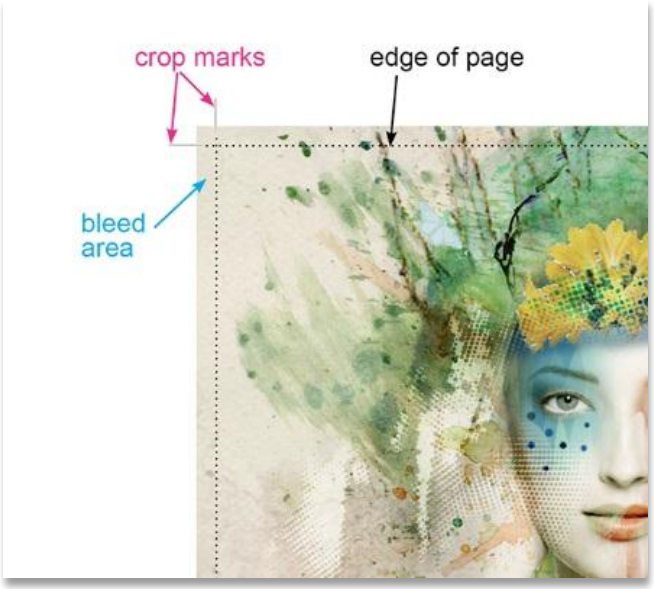
The Third Stage: Printing Plates (for Offset Presses)

After the proof has been approved, the project is ready to be produced on a printing press. If the project is to be produced on a Digital printing press, the pre-press process is pretty much complete. This is because the graphics file can be electronically transferred directly to the Digital press for output without the need for printing plates.

However, if the project is to be produced on an Offset press, it will need printing plates. In this case, the final stage of the pre-press process is the creation of **printing plates**. Printing plates are custom made for each job and provide the method for transferring the inked images to the proper place on the paper.

CROP MARKS

Crop marks are crossed lines placed at the corners of an image or a page to indicate where to trim it are known as crop marks. Crop Marks may be drawn on manually or automatically applied with some desktop publishing software programs.

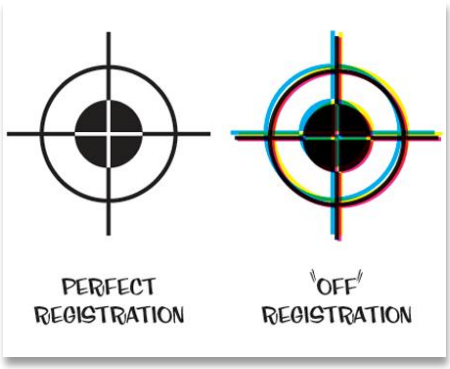


Crop marks are typically used when printing to a larger sheet of paper than the final trim size of the document, especially when doing bleeds. They indicate where to cut the paper.

Similar to crop marks, centre marks indicate the centre of a spread and usually mean that is where the page is to be folded.

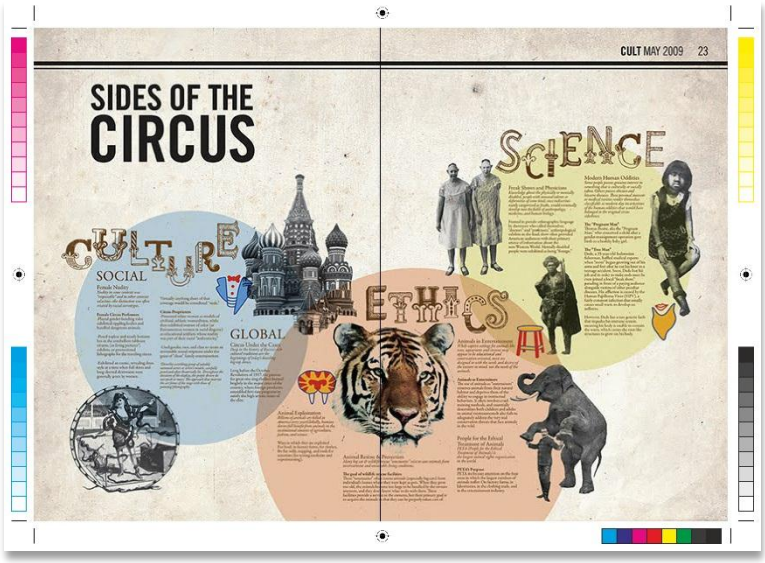
REGISTRATION MARKS

The little circle with a cross through it is printed using every colour of the four-colour printing process. If they're being printed accurately, they should overlap precisely so the mark looks entirely black. Therefore if any of the colours are slightly offset (out of register) then they'll be displayed, showing the job isn't being printed correctly.



COLOUR BARS

Colour bars are printed outside the trim area and are used for quality control purposes by the printer. Squares of colour are printed on the area of the page to be trimmed off, which the printing press operator uses to check colour density and consistency is maintained. This checking process is automated by some printers, with digital scanners tracking the colour bars to ensure quality and consistency is maintained



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